



PCT/AU2004/001390

Patent Office  
Canberra


I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004903578 for a patent by BREVILLE PTY. LTD. as filed on 01 July 2004.



WITNESS my hand this  
Twenty-ninth day of October 2004

A handwritten signature in black ink, appearing to be 'A' followed by a stylized flourish.

LEANNE MYNOTT  
MANAGER EXAMINATION SUPPORT  
AND SALES



P00009  
Regulation 3.2

AUSTRALIA

Patents Act 1990

**PROVISIONAL SPECIFICATION FOR THE INVENTION ENTITLED:**

**SPOUT WITH SEAL**

This invention is described in the following statement:-

## **Spout With Seal**

### Field of the Invention

5 The invention pertains to spouts and more particular to a spout that carries a seal. The spout pivots, without the use of separate springs or any other resilient bias, from a sealed position to a dispensing position.

### Background of the Invention

10 Spouts are used on a variety of appliances. A citrus juicer such as the one shown in the applicant's co-pending Application No's. 2004902069 and 2003905812 shows a citrus juicer having a juice collector. In preferred embodiments, juice that accumulates in a collector is dispensed through a hole to a spout that dispenses the collected juice into a container such as a drinking glass. Unless the opening in the juice collector can be sealed,  
15 removal of the collector after a glass is removed or interchanged or for cleaning or other purposes will result in undesirable leakage through the opening. Accordingly, some kind of seal for the opening is required. This same logic applies to other appliances that have a need for a spout that is adjacent to a dispensing opening.

20 Other forms of pivoting sealing spouts are known but each of the known prior art pivoting spouts requires the use of some form of resilient spring or detent mechanism or other mechanical complexity in order that the spout can be maintained in both a sealed and a dispensing position.

### 25 Objects and Summary of the Invention

It is an object of the invention to provide a simple, reliable spout that pivots into a sealing position.

Accordingly, there is provided a spout that is adjacent to a dispensing opening. The spout carries a seal that enters the opening and is retained by  
30 the opening.

### Brief Description of the Drawing Figures

Figure 1 is a perspective view of a citrus juicer incorporating a spout according to the teachings of the present invention;

Figure 2 is a perspective view of a juice collector with spout in a dispensing position;  
Figure 3 is a perspective view of the juice collector depicted in Figure 2, with the spout in a sealed position;  
5 Figure 4 is a cross sectional view of the juice collector and spout depicted in Figure 2;  
Figure 5 is a cross sectional view of the collector and spout as depicted in Figure 3;  
Figures 6, 7 & 8 are side elevations, partially sectioned depicting a juice  
10 collector and spout; and  
Figure 9 is a perspective view of an inverted spout depicting the bottom of the elastomeric seal.

#### Best Mode and Other Embodiments of the Invention


15 As shown in Figure 1, a citrus juicer 10 includes a housing 11 that is constructed to contain a motor and a gearbox. The housing contains an upper collar having an inclined upper rim 12. The housing supports a juice collector 13 within which is located a pulp filter 14. The collector 13 and filter each have a central hole through which passes a rotating shaft. The rotating shaft carries  
20 a reamer 15. In some embodiments, the citrus press or juicer 10 includes an actuating arm (not shown). The actuating arm is shown in the applicant's co-pending applications that are referred to above. Juice that accumulates in the collector 13 is dispensed via an opening in a low point of the collector onto the dispensing spout 16. In preferred embodiments, the spout 16 discharges into  
25 a glass or other container. An indentation 7 in the base 8 of the juicer 10 accommodates the glass or container.

As shown in Figures 2 and 3 the spout 16 in this example is fabricated from a pressed stainless steel sheet. The rear portion of the spout 16 forms a support and pivot axis 17 that is retained by a bracket 18 that is mounted  
30 under or formed integrally with the collector 13. The spout forms a shallow "U" in cross section as shown in Figure 3. For the user's convenience and safety, the forward portion of the spout 16 is rounded 19. The spout includes a central opening that received a round elastomeric seal 20 that is located between the pivot axis 17 and the forward portion 19 of the spout.

As shown in Figures 4 and 5, the rear portion 21 of the spout 16 is pressed-formed so as to define lateral spout brackets 22 (see Figure 9). The spout brackets 22 may be pivotally affixed to the lateral ends of the collector-mounted bracket 18 by rivets 23 or by other means. Figures 4 and 5 also depict the central opening 24 that receives the elastomeric seal 20. As shown in Figure 4, unless the seal 20 is inserted into the dispensing opening 25 of the collector 13, juice will run through the opening 25 and down the spout 16. As shown in Figure 5, the elastomeric seal 20 is adapted to occupy the opening 25 and be retained by it. In preferred embodiments, the seal 20 includes an optional waist or central area of reduced diameter 26 that is smaller in diameter than a cap portion 27 of the seal. The waist 26 provides good sealing action and tactile feedback when it seats into the opening 25. In some preferred embodiments, the dispensing opening 25 has a rounded interior edge 28 that is smaller than the diameter of the cap of the seal 27 but large enough to admit the tapered edges 27a of the cap 27 when the spout 16 is urged firmly toward the collector 13. Figures 4 and 5 also illustrate that the seal 20 can be retained by the spout by providing a circumferential groove 29 below the waist 26 in the seal 20 for a tight fit between seal 20 and spout opening 29.

As shown in Figures 6, 7 and 8, the spout has at least three positions. As shown in Figure 6, the spout 16 has a fully opened position. In this position, the spout 16 may be stabilized against the collector 13 by a rear edge 30 of the spout bracket 17 that prevents over-rotation. The fully open position provides easy access to the seal area, spout and dispensing opening 25 for cleaning. As shown in Figure 7, the spout 16 is free to rotate through a range of intermediate positions between the fully opened position and the closed position. As shown in Figure 8, the spout has a closed or sealed position that occurs when the seal 20 is restrained against gravity by the collector opening 25. In this position, juice cannot escape the opening 25 and the spout 16 will not disengage from the opening 25 under the influence of gravity alone. A slight downward finger pressure on the spout 16 will allow the cap 27 of the seal 20 to deform and thereby pass through the opening 25.

As shown in Figure 9, the spout 16 preferably includes a circumferential edge 40 which is pressed into the spout and which rigidises it. Also shown in



this figure is the bottom portion 41 of the seal 20 which is larger in diameter than the spout opening 29 and which is visible against the underside 42 of the spout 16.

- 5 While the invention has been disclosed with reference to particular details of construction, these should be understood as having been provided by way of example and not as limitations to the scope or spirit of the invention.

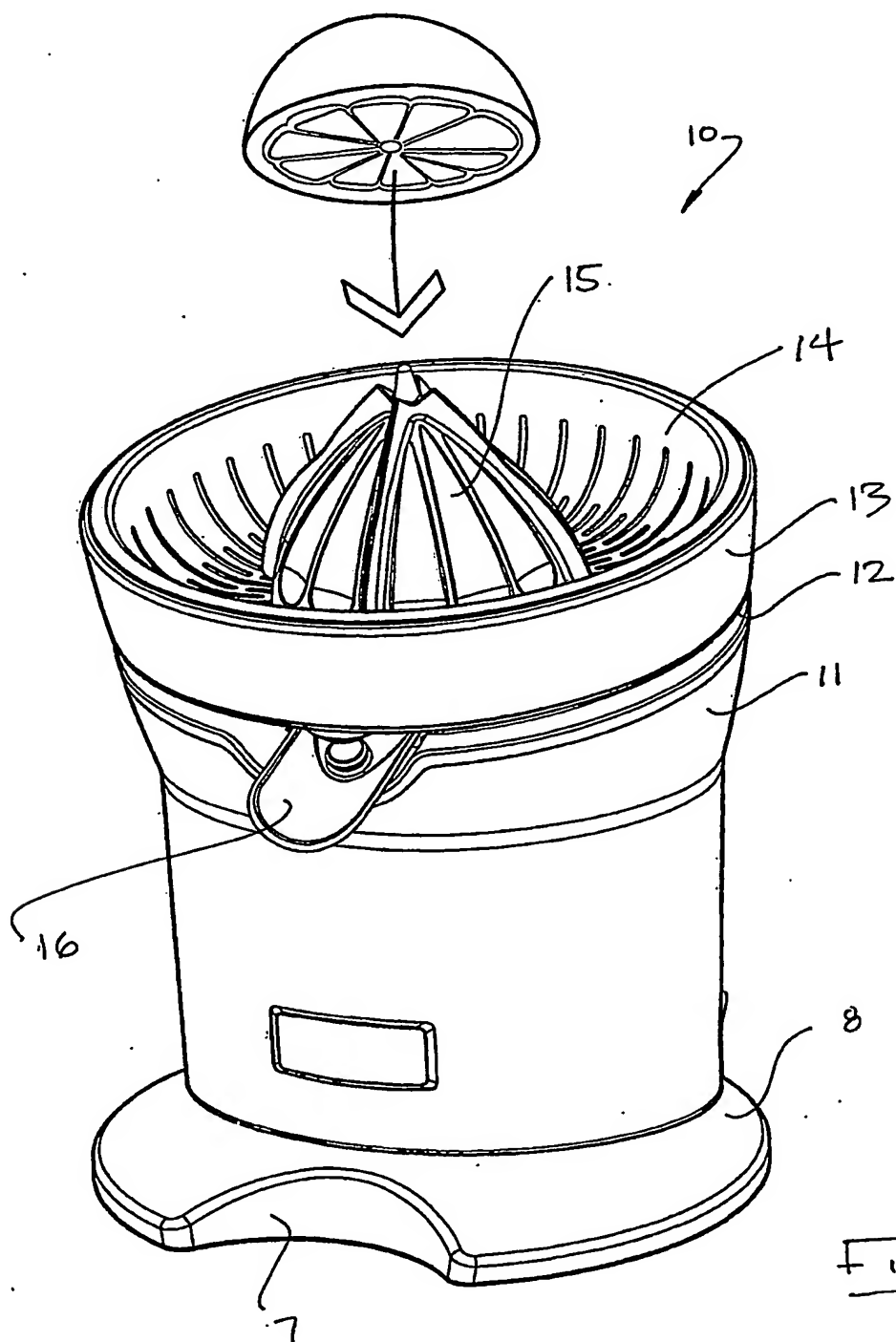


Fig. 1

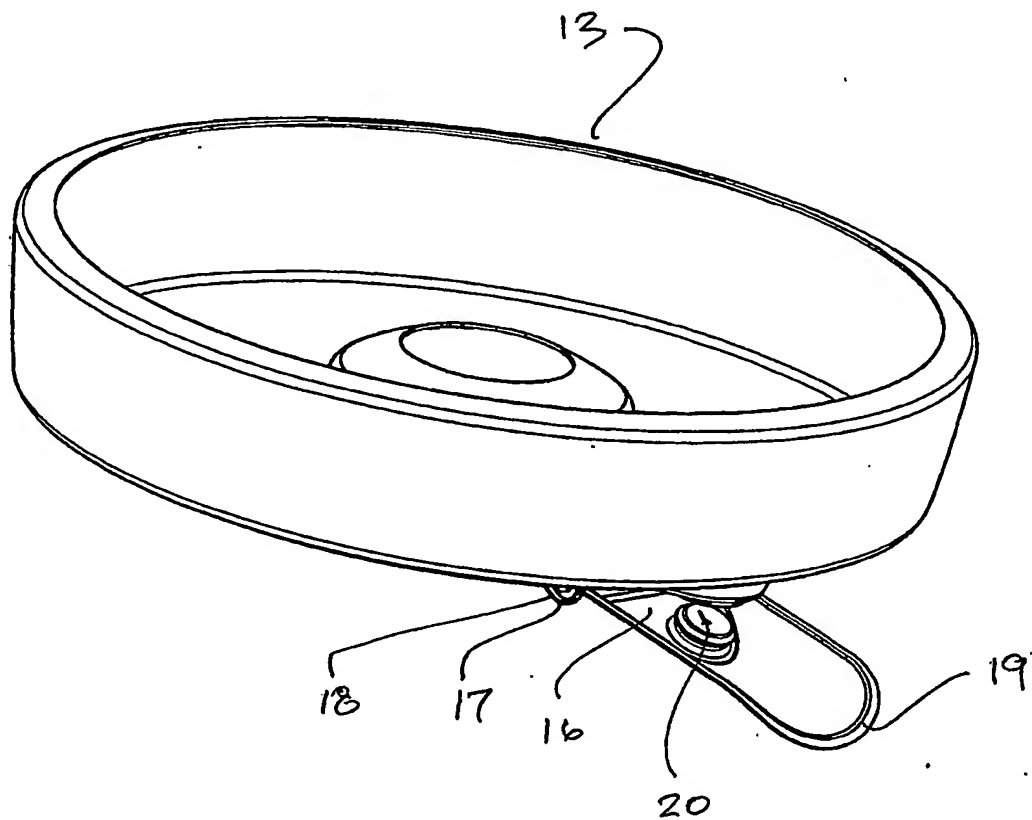


FIG. 2

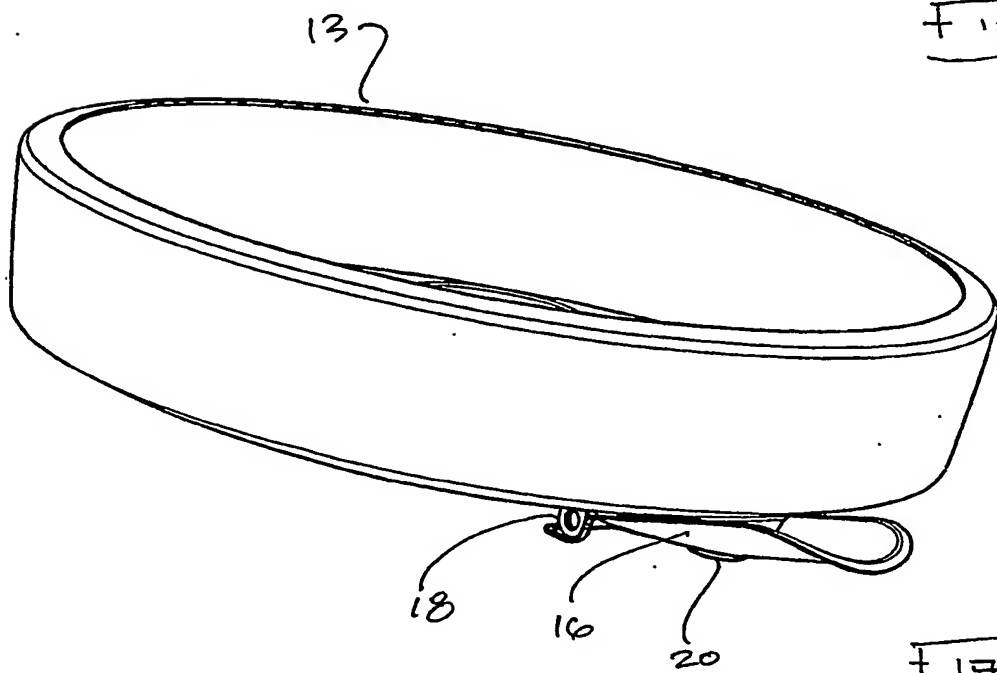
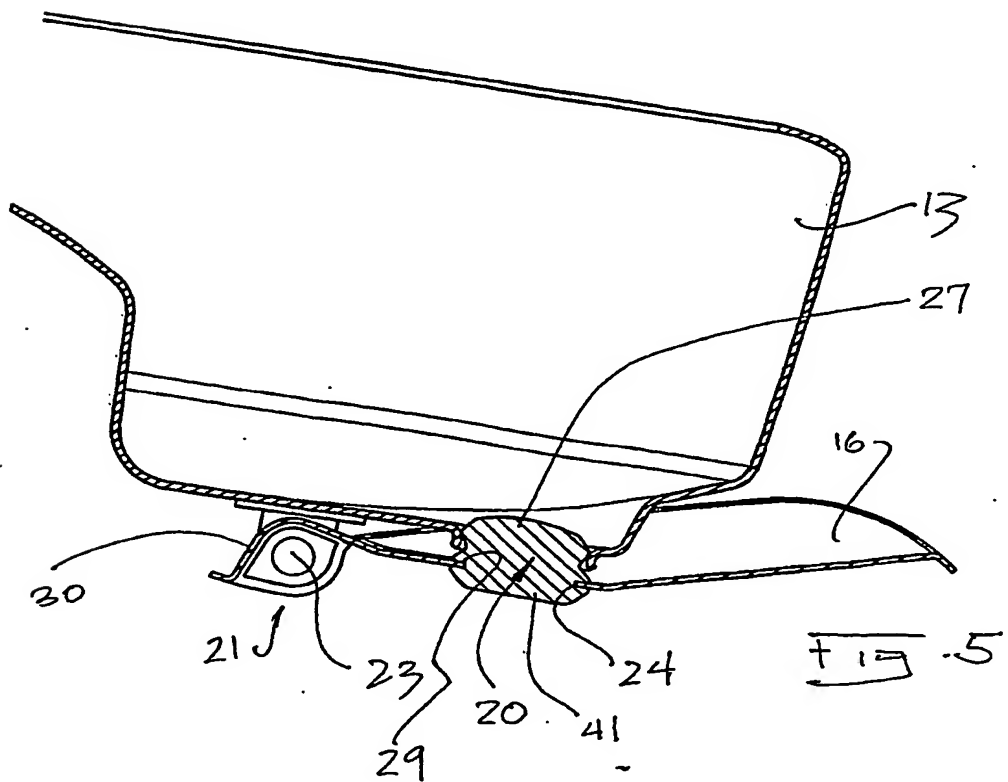
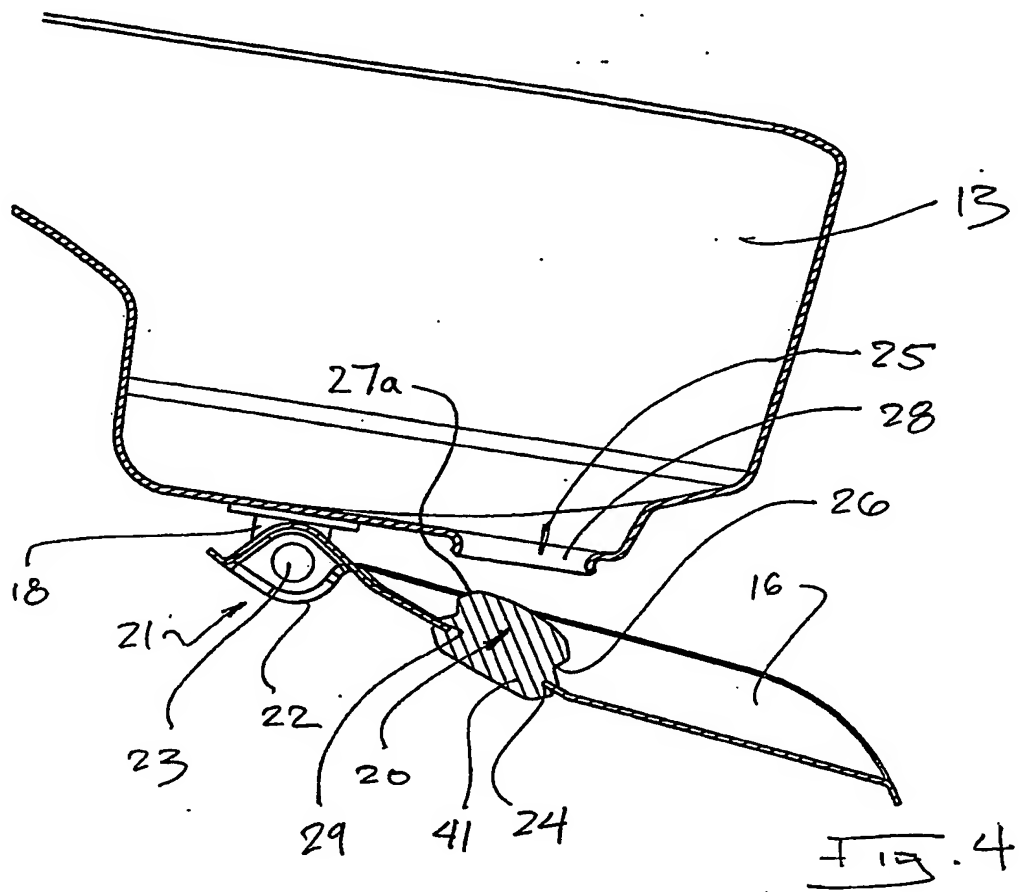
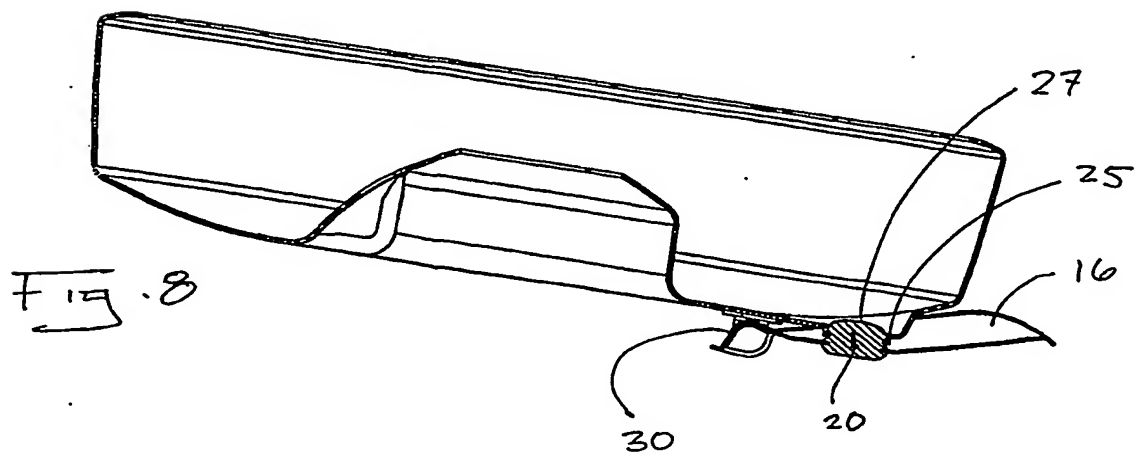
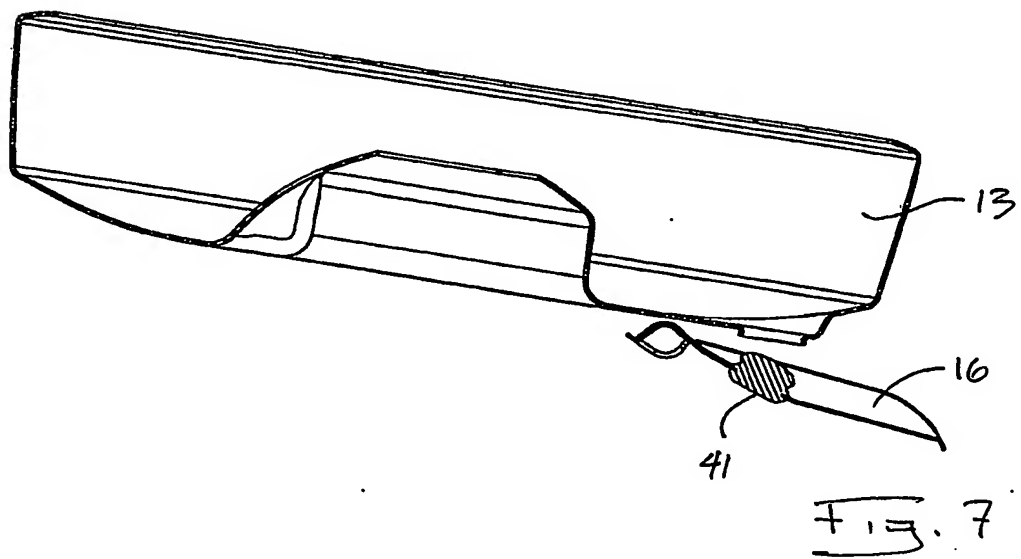
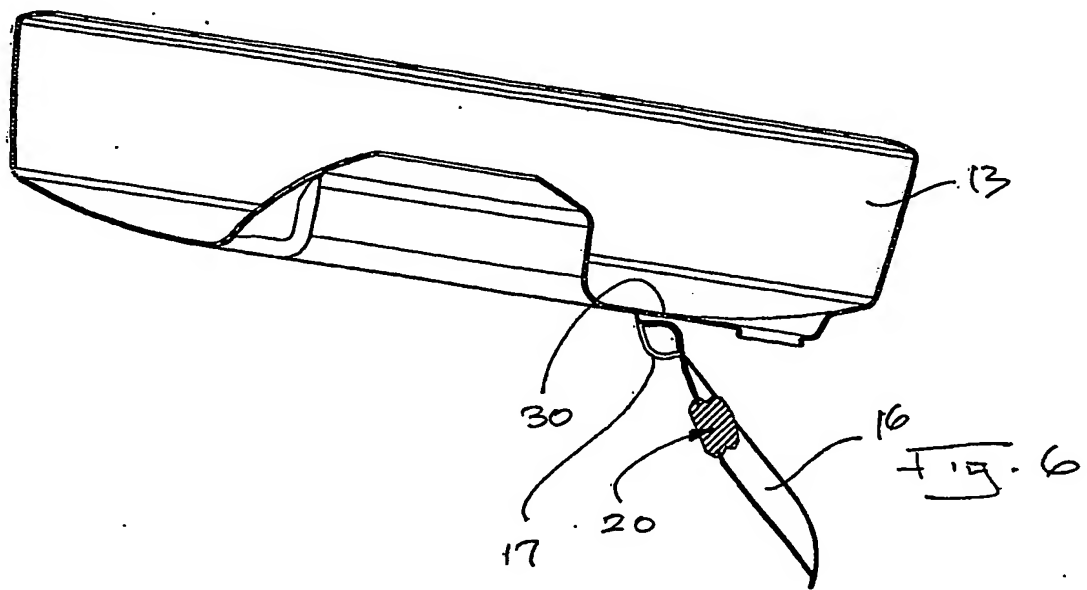


FIG. 3







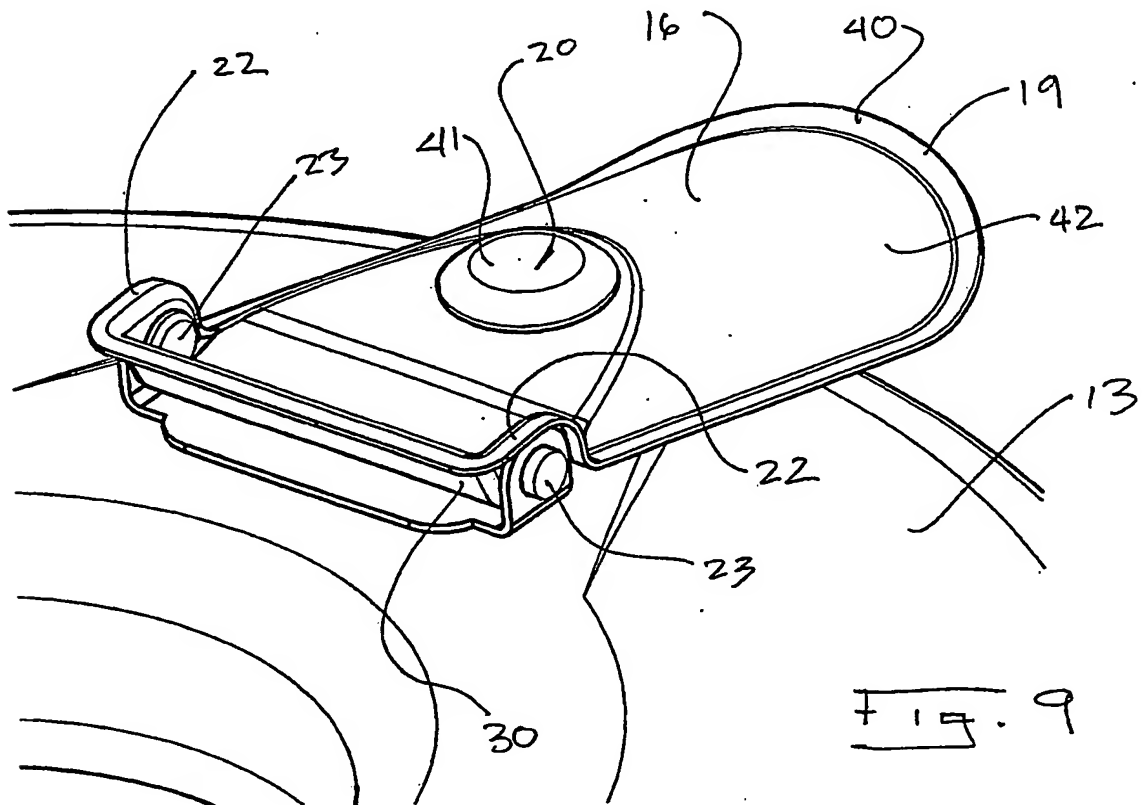


Fig. 9

# Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/AU04/001390

International filing date: 13 October 2004 (13.10.2004)

Document type: Certified copy of priority document

Document details: Country/Office: AU  
Number: 2004903578  
Filing date: 01 July 2004 (01.07.2004)

Date of receipt at the International Bureau: 08 November 2004 (08.11.2004)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland  
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse